## Peerless

Ferrofluid Filled Motor

• Fabric Diaphragm

High Sensitivity

Cooling

BC25SC06-04





SPECIFICATIONS			
Transducer Size		1	in
Impedance		4	Ω
Frequency Range <sup>1</sup>		2000 - 20000	Hz
Sensitivity <sup>2</sup> (2.83V   1W @ 1m)		96.5   93.5	dB
Power Rating (IEC 268-5)		50	W
Voice Coil Size		24.5	mm
Air Gap   Winding Height	H <sub>ag</sub>   H <sub>vc</sub>	2   2	mm
Net Weight	ag ' vc	0.069	kg
PARAMETERS <sup>3</sup>			
Eff. Piston Area	Sd	4.91	cm <sup>2</sup>
DC Resistance	R	2.9	Ω
Minimum Impedance	Z <sub>min</sub>	3.2	Ω
Inductance	L	0.025	mH
Resonance Frequency <sup>4</sup>	F	1400	Hz
Mechanical Q Factor	Q <sub>ms</sub>	3.98	-
Electrical Q Factor	Q <sub>es</sub>	2.07	-
Total Q Factor	Q <sub>ts</sub>	1.4	-
Moving Mass	M ms	0.312	g
Compliance	C <sub>ms</sub>	43	μm/N
Equivalent Volume	V as	0.002	L
Motor Force Factor	as Bl	1.94	Tm
Motor Efficiency	β	1.3	(BI) <sup>2</sup> / R <sub>e</sub>
Linear Excursion <sup>5</sup>	•	0.667	mm
	X <sub>max</sub>		



Details on this spec sheet are for reference only and should not be used for setting production limits. Specifications and product cosmetics are subject to change without notice. Peerless is a registered trademark of Tymphany Enterprises. All measurements conducted in test lab at 25°C ±10°C, 50%RH ±10%. <sup>1</sup> Specified by Engineering as linear working range of transducer. <sup>2</sup> Measured at 2.83V at 1m and normalized to 1W with respect to nominal impedance. <sup>3</sup> Measured in Free Air without preconditioning, therefore subject to some deviation. <sup>4</sup> Impedance and Fs value measured under different conditions. <sup>5</sup> Equal/Overhung:  $(H_{vc} - H_{ag})/2 + H_{ag}/3$ . Underhung:  $(H_{ag} - H_{vc})/2 + H_{vc}/3$ . <sup>6</sup> Mechanically limited excursion (e.g. bottoming, spider crash).